

We claim:

1. A method for use by a device in a wireless communications environment, the method comprising the step of:

automatically selecting one of a plurality of radio frequency channels for communication with other devices, wherein the selection of a radio frequency channel is performed such that radio frequency interference with other devices is reduced;

communicating the selection of a radio frequency channel to other devices by sending a message.

2. A method comprising the steps of:

scanning a plurality of radio frequency channels during a scan interval;

Logic for receiving messages on the plurality of radio frequency channels during the scan interval;

maintaining a channel map having an entry for each of the plurality of radio frequency channels, and if one or more messages was received on a channel, the corresponding entry further including a device ID for at least one of the devices that sent a message on the channel;

selecting a channel from the channel map;

transmitting messages on the selected channel during a claim interval;

receiving messages on the selected channel during the claim interval;

ascertaining whether the apparatus should commence communications with other devices on the selected channel based upon characteristics of the messages received on the channel.

3. The method of claim 2 wherein the step of maintaining a channel map further comprises the step of storing a power level for each device ID for each entry in the channel map, and wherein the step of selecting a channel from the channel map selects a channel having either no device ID or a device ID that has the lowest stored power level.